

CLAIMS

1 1. A method for transmitting data packets in a
2 lossy environment, comprising:
3 transmitting a first data packet with a full header;
4 transmitting a second data packet with a compressed
5 header, which compressed header includes differences
6 based upon the full header of the first data packet; and
7 transmitting a third data packet with a compressed
8 header, the compressed header of the third data packet
9 including differences in the header of the third data
10 packet as compared to the first data packet.

1 2. The method of claim 1 further including the
2 step of transmitting a fourth data packet, the fourth
3 data packet having a compressed header whose differences
4 are based upon the first signals' full header.

3. A method for receiving and interpreting data packets, comprising receiving a first data packet having a full header;

receiving a second data packet having a compressed header whose differences are based upon the full header of the first packet; and

receiving a third data packet having a compressed header, which compressed header is based upon differences with the full header of the first data packet.

1 4. The method of claim 3, further including the
2 step of receiving a fourth data packet having a
3 compressed header based upon the full header of the first
4 data packet.

1 5. The method of claim 3, further comprising the
2 step of receiving a data packet with errors, and upon
3 determining that the data packet has errors, discarding
4 the data packet.

1 6. A system for transmitting data packets,
2 comprising:
3 a memory for storing computer instructions that
4 define compression logic, which compression logic causes
5 compressed data packets to be formed with differences
6 that are measured against a full and uncompressed data
7 packet; and
8 a processor coupled to receive and execute the
9 computer instructions stored within the memory to cause
10 the system to operate in a manner defined by the logic of
11 the computer instructions.

1 7. The system of claim 6, further including an
2 internal bus coupled to the memory and to the processor
3 to enable the processor to receive the computer
4 instructions from the memory.

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1 8. The system of claim 6 further including
2 transceiver circuitry for transmitting data packets over
3 a wireless interface.

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1 9. A system for receiving compressed data packets,
2 comprising transceiver circuitry for receiving the data
3 packets, which data packets are transmitted over an air
4 interface;
5 processing circuitry for reconstructing the data
6 packets that are received in a compressed format, which
7 compressed format includes packet header information
8 whose differences are based upon a specified full and
9 uncompressed packet header; and
10 audio processing circuitry for converting
11 communication signals to sound signals to communication
12 signals.

1 10. The receiver of claim 9, further including
2 logic circuitry for determining whether a packet was
3 received in a compressed or uncompressed format.

1 11. The receiver of claim 10, wherein the logic
2 circuitry is formed to reconstruct a packet header based
3 upon defined differences specified within the compressed
4 header and a specified full header wherein the specified
5 full header is used as a basis for each of a plurality of
6 subsequently transmitted packets having compressed
7 headers.

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1 12. A plurality of communication signals,
2 comprising a first communication signal transmitted in an
3 uncompressed format having a full header;
4 a second communication signal having a compressed
5 header, which compressed header specifies differences
6 between its header in an uncompressed format and the full
7 header of the first data packet; and
8 a third communication signal having a compressed
9 header, which compressed header specifies differences
10 between a full header for the third communication signal
11 and the full header of the first communication signal.

1 13. The communication signals of claim 12, wherein
2 the second and third communication signals further
3 include uncompressed header information for those
4 portions of a header that could not be compressed and for
5 which differences with the full header of the first
6 communication signal could not be specified.

1 14. The communication signals of claim 13, further
2 comprising a byte for specifying whether the
3 communication signal has a compressed or uncompressed
4 header.
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- 1 15. The communication signal of claim 13, further
- 2 comprising at least one byte for identifying the Internet
- 3 protocol version format that defines the signal layout.

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